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#11

OCT 15 2001

1638

TECH CENTER 1600/2900

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/486,094

DATE: 10/01/2001

TIME: 15:18:47

Input Set : A:\09486094seqlist.txt

Output Set: N:\CRF3\10012001\I486094.raw

1 <110> APPLICANT: Freyssinet, Georges
 2 Deroze, Richard
 3 Hoffman, Jules
 5 <120> TITLE OF INVENTION: GENE CODING FOR ANDROCTONINE, VECTOR
 6 CONTAINING SAME AND TRANSFORMED DISEASE-RESISTANT PLANTS
 7 OBTAINED
 9 <130> FILE REFERENCE: A33002-PCT-USA 072667.0124
 11 <140> CURRENT APPLICATION NUMBER: 09/486,094
 12 <141> CURRENT FILING DATE: 2000-07-17
 14 <150> PRIOR APPLICATION NUMBER: PCT/FR98/01814
 15 <151> PRIOR FILING DATE: 1998-08-18
 17 <150> PRIOR APPLICATION NUMBER: FRANCE 97/10632
 18 <151> PRIOR FILING DATE: 1997-08-20
 20 <160> NUMBER OF SEQ ID NOS: 12
 22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 110
 26 <212> TYPE: DNA
 27 <213> ORGANISM: Androctonus australis
 29 <220> FEATURE:
 30 <221> NAME/KEY: CDS
 31 <222> LOCATION: (1)...(75)
 32 <223> OTHER INFORMATION: Androctonine
 34 <400> SEQUENCE: 1
 35 agg tcc gtg tgc agg cag atc aag atc tgc agg agg agg ggt ggt tgc 48
 36 Arg Ser Val Cys Arg Gln Ile Lys Ile Cys Arg Arg Arg Gly Gly Cys
 37 1 5 10 15
 39 tac tac aag tgc act aac agg cca tac tgagctcgac gaggcgaacg 95
 40 Tyr Tyr Lys Cys Thr Asn Arg Pro Tyr
 41 20 25
 43 tgtcgacgg tccgg 110
 45 <210> SEQ ID NO: 2
 46 <211> LENGTH: 106
 47 <212> TYPE: DNA
 48 <213> ORGANISM: Tobacco
 50 <220> FEATURE:
 51 <221> NAME/KEY: CDS
 52 <222> LOCATION: (12)...(101)
 53 <223> OTHER INFORMATION: Tobacco PR-1a signal peptide
 55 <400> SEQUENCE: 2
 56 ggcgtcgacgc c atg ggt ttc gtg ctt ttc tct cag ctt cca tct ttc ctt 50
 57 Met Gly Phe Val Leu Phe Ser Gln Leu Pro Ser Phe Leu
 58 1 5 10
 60 ctt gtg tct act ctt ctt ttc ctt gtg atc tct cac tct tgc cgt 98
 61 Leu Val Ser Thr Leu Leu Phe Leu Val Ile Ser His Ser Cys Arg
 62 15 20 25
 64 gcc ggcga 106

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65 Ala
66 30
69 <210> SEQ ID NO: 3
70 <211> LENGTH: 211
71 <212> TYPE: DNA
72 <213> ORGANISM: Artificial Sequence
74 <220> FEATURE:
75 <223> OTHER INFORMATION: Linker
77 <221> NAME/KEY: CDS
78 <222> LOCATION: (12)...(176)
79 <223> OTHER INFORMATION: Linker
81 <400> SEQUENCE: 3
82 gcgtcgacgc c atg ggt ttc gtg ctt ttc tct cag ctt cca tct ttc ctt 50
83           Met Gly Phe Val Leu Phe Ser Gln Leu Pro Ser Phe Leu
84           1           5           10
86 ctt gtg tct act ctt ctt ttc ctt gtg atc tct cac tct tgc cgt 98
87 Leu Val Ser Thr Leu Leu Phe Leu Val Ile Ser His Ser Cys Arg
88           15          20          25
90 gcc agg tcc gtg tgc agg cag atc aag atc tgc agg agg agg ggt ggt 146
91 Ala Arg Ser Val Cys Arg Gln Ile Lys Ile Cys Arg Arg Arg Gly Gly
92   30          35          40          45
94 tgc tac tac aag tgc act aac agg cca tac tgagctggc gagggcgaacg 196
95 Cys Tyr Tyr Lys Cys Thr Asn Arg Pro Tyr
96           50          55
98 tgtcgacgga tccgg 211
100 <210> SEQ ID NO: 4
101 <211> LENGTH: 75
102 <212> TYPE: DNA
103 <213> ORGANISM: Artificial Sequence
105 <220> FEATURE:
106 <223> OTHER INFORMATION: Synthetic oligonucleotide 1
108 <400> SEQUENCE: 4
109 gcgtcgacgc gatgggttgc gtgtttct cttagttcc atcttcctt ctttgtctta 60
110 ctttcttctt tttcc 75
112 <210> SEQ ID NO: 5
113 <211> LENGTH: 72
114 <212> TYPE: DNA
115 <213> ORGANISM: Artificial Sequence
117 <220> FEATURE:
118 <223> OTHER INFORMATION: Synthetic oligonucleotide 2
120 <400> SEQUENCE: 5
121 tcgccccgac ggcaagagta agagatcaca agaaaaagaa gaagagtaga cacaagaagg 60
122 aaagatggaa gc 72
124 <210> SEQ ID NO: 6
125 <211> LENGTH: 44
126 <212> TYPE: DNA
127 <213> ORGANISM: Artificial Sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: Synthetic oligonucleotide 3

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132 <400> SEQUENCE: 6
133 aggtccgtgt gcagggcagat caagatctgc aggaggagggt gtgg          44
135 <210> SEQ ID NO: 7
136 <211> LENGTH: 97
137 <212> TYPE: DNA
138 <213> ORGANISM: Artificial Sequence
140 <220> FEATURE:
141 <223> OTHER INFORMATION: Synthetic oligonucleotide 4
143 <400> SEQUENCE: 7
144 ccggatccgt cgacacgttc gcctcgccga gctcagtatg gcctgttagt gcacttggtag 60
145 tagcaaccac ccctccctcgc agatcttg atctgcc                         97
147 <210> SEQ ID NO: 8
148 <211> LENGTH: 85
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial Sequence
152 <220> FEATURE:
153 <223> OTHER INFORMATION: Synthetic oligonucleotide 5
155 <400> SEQUENCE: 8
156 agggccccctt agggtttaaa cggccagtc ggccgaattc gagctcggtt cccggggatc 60
157 ctctagatgc gacctgcagg catgc                                     85
159 <210> SEQ ID NO: 9
160 <211> LENGTH: 66
161 <212> TYPE: DNA
162 <213> ORGANISM: Artificial Sequence
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Synthetic oligonucleotide 6
167 <400> SEQUENCE: 9
168 ccctgaacca ggctcgaggg cgcgccttaa taaaagctt gcatgcctgc aggtcgactc 60
169 tagagg                                         66
171 <210> SEQ ID NO: 10
172 <211> LENGTH: 93
173 <212> TYPE: DNA
174 <213> ORGANISM: Artificial Sequence
176 <220> FEATURE:
177 <223> OTHER INFORMATION: Oligonucleotide primer
179 <400> SEQUENCE: 10
180 ccggccatc aggcacact taattaagtt taaacgcggc cccggcgccg ctaggtgtgt 60
181 gctcgagggc ccaacctcag tacctgggtt agg                               93
183 <210> SEQ ID NO: 11
184 <211> LENGTH: 93
185 <212> TYPE: DNA
186 <213> ORGANISM: Artificial Sequence
188 <220> FEATURE:
189 <223> OTHER INFORMATION: Oligonucleotide primer
191 <400> SEQUENCE: 11
192 ccggcctgaa ccaggtactg aggttggggcc ctcgagcaca cacctaggcg cgccggggcc 60
193 gcgtttaaac ttaattaagt gtggcctgac tgg                               93
195 <210> SEQ ID NO: 12
196 <211> LENGTH: 19

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Input Set : A:\09486094seqlist.txt
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197 <212> TYPE: PRT
198 <213> ORGANISM: Artificial Sequence
200 <220> FEATURE:
201 <223> OTHER INFORMATION: Androctonine consensus sequence
203 <221> NAME/KEY: VARIANT
204 <222> LOCATION: (1)...(1)
205 <223> OTHER INFORMATION: Any amino acid
207 <221> NAME/KEY: VARIANT
208 <222> LOCATION: (3)...(7)
209 <223> OTHER INFORMATION: Any amino acid
211 <221> NAME/KEY: VARIANT
212 <222> LOCATION: (9)...(13)
213 <223> OTHER INFORMATION: Any amino acid
215 <221> NAME/KEY: VARIANT
216 <222> LOCATION: (15)...(17)
217 <223> OTHER INFORMATION: Any amino acid
219 <221> NAME/KEY: VARIANT
220 <222> LOCATION: (19)...(19)
221 <223> OTHER INFORMATION: Any amino acid
223 <400> SEQUENCE: 12 / 5 / 10 / 15 /
W--> 224 Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa /
225 1 / 5 / 10 / 15 /
W--> 226 Xaa Cys Xaa /

VERIFICATION SUMMARY
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Input Set : A:\09486094seqlist.txt
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L:224 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12